**REMARKS**

The Office Action has been carefully reviewed. Restriction has been required between what the PTO deems to be eight patentably distinct inventions, namely:

Group I, drawn to the polypeptide comprising SEQ ID NO:2 (rat ARMS) and comprising claims 1, 2, 5 and 8 (each in part);

Group II, drawn to the polypeptide comprising SEQ ID NO:4 (human ARMS) and comprising claims 1, 3, 4, 6, 7, and 9 (each in part);

Group III, drawn to a molecule which contains the antigen-binding portion of an antibody specific for a polypeptide comprising SEQ ID NO:2 (rat ARMS) and comprising claims 10-12 and 13 (each in part);

Group IV, drawn to a molecule which contains the antigen-binding portion of an antibody specific for a polypeptide comprising SEQ ID NO:4 (human ARMS) and comprising claims 10-12 and 15 (each in part);

Group V, drawn to a method for visualizing the growth cone of neurons using an antibody specific for SEQ ID NO:2 (rat ARMS) and comprising claim 14;

Group VI, drawn to a method for visualizing the growth cone of neurons using an antibody specific for SEQ ID NO:4 (human ARMS) and comprising claim 16;

Group VII, drawn to nucleic acids comprising SEQ ID NO:1 (rat ARMS), vectors, transformed host cells and method for producing the isolated polypeptide and comprising claims 17-19, 22, 24, 26-30 and 32-34 (each in part); and

Group VIII, drawn to nucleic acids comprising SEQ ID

NO:3 (human ARMS), vectors, transformed host cells and method for producing the isolated polypeptide and comprising claims 17, 20-21, 23, 25-29, and 31-34 (each in part).

Applicants provisionally elect with traverse Group II, presently comprising claims 1, 3, 4, 6, and 7.

The requirement for restriction between Groups I and II are respectfully traversed because the polypeptide comprising SEQ ID NO:2 (rat ARMS) is highly structurally related to the polypeptide comprising SEQ ID NO:4 (human ARMS). Figure 2 and the present specification on page 40, lines 18-19, discloses 91% amino acid sequence identity between rat and human ARMS. This is a very high level of sequence identity, and accordingly, the necessary search for Groups I and II would be coextensive. Examination of both Groups I and II is respectfully solicited.

All of claims 1-7 presently appearing in this case should be examined in the present application. Withdrawal of the restriction requirement to the extent requested herein and examination and allowance of claims 1-7 in the case are therefore earnestly solicited.

Respectfully submitted,

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

Claim 1 has been amended as follows:

1(Amended). An isolated polypeptide, which associates with TrkA and p75 neurotrophin receptors, is a target for phosphorylation by neurotrophin and ephrin receptor tyrosine kinases, enhances neurotransmitter release, and modulates the clustering of proteins involved in ion channel formation, comprising the amino acid sequence of:

(A) SEQ ID NO:2;

(B) SEQ ID NO:4;

(C) a fragment of the polypeptide of SEQ ID NO:2;

(D) a fragment of the polypeptide of SEQ ID NO:4;

~~(E) a variant polypeptide which is at least 95% identical to SEQ ID NO:2,~~

~~(F) a variant polypeptide which is at least 95% identical to SEQ ID NO:4;~~ or

~~(G)~~ (E) a functional derivative or a salt of (A), (B), (C), or (D), ~~(E), or (F),~~

wherein said fragments (C) and (D) and said ~~variants (E) and (F)~~ functional derivatives or salt (E) have the properties of associating with TrkA and p75 neurotrophin receptors, being a target for phosphorylation by neurotrophin and ephrin receptor tyrosine kinase, enhancing neurotransmitter release, and modulating the clustering of proteins involved in ion channel formation.